Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Unlicensed Operation in the TV Broadcast Bands	)	ET Docket No. 04-186
Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band	)	ET Docket No. 02-380

REPLY COMMENTS OF NARTE, INC.

NARTE, Inc. hereby submits reply comments in response to the Commission's Notice of Proposed Rule Making on allowing unlicensed devices to operate in broadcast television spectrum at locations where that spectrum is not being used. NARTE applauds the Commission's continued efforts to open up new or under utilized bands for broadband wireless applications. NARTE[1] is a non profit organization specializing in the certification of Telecommunication, EMC, ESD Control, Product Safety Engineers and Technicians, as well as Wireless Installers.

In the Notice, the Commission sought comment on proposed rules that would ensure that licensed television broadcasters would not experience harmful interference from unlicensed devices. The Commission stated that one of the key issues to resolve is how unlicensed devices would know that they were avoiding actively-used spectrum. The Commission made several proposals, including having devices installed by

[1] NARTE was founded in 1982 in response to the FCC deregulation and the removal of the requirements of requiring a Radio Telephone Licenses to service some telecommunications systems. Further information can be obtained from the NARTE web site at www.narte,org

professional technicians.[2] Specifically, the Commission stated that for fixed/access devices, such as devices that would be used by Wireless Internet Service Providers (WISPs), one possible method of ensuring that no interference issues are presented is to require the unlicensed devices to be professionally installed by a party that would determine the device's geographic location and the available unused channels at that location.

> In this case, the installer could provide the device's coordinates to a frequency coordinator, industry association, local broadcast group or other party that maintains an appropriate and current data base to determine which TV channels are unused at the device's location. The installing party would then configure the device to operate only on unused channels.[3]

In addition, the Notice specifically cites NARTE's certification program, and solicits comment on whether programs such as NARTE's should be recognized as sufficient training to qualify as a "professional installer." The Notice also solicits comment on what criteria should be established for programs that will certify "professional installers."[4]

In comments, Motorola urges the Commission to require that the installation be supervised and/or inspected by a NARTE (National Association of Radio Telecommunications Engineers) Certified EMC (Electromagnetic Compatibility) Engineer, an SBE (Society of Broadcast Engineers) Certified Broadcast Radio or Television Engineer, FCC Commercial License Holder, or a Registered Professional Engineer. According to Motorola, the professional installer must determine that the installation will operate in compliance with all FCC Rules adopted for this service, in

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[2] Unlicensed Operation in the TV Broadcast Bands , ET Docket No. 04-186, and Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band, ET Docket No. 02-380, Notice of Proposed Rulemaking, released May 25, 2004 at para. 20.

[3] Id. at para. 26.

[4] Id.

particular that the unlicensed transmissions will not cause interference to licensed operations.[5]

NARTE supports Motorola's position. In NARTE's view, these systems[6] need to be either professionally installed or inspected by qualified individuals versed in the technology. In fact, requiring that the installer or inspector reviewing the installation be certified or licensed is no more burdensome then requiring that a test lab must be accredited to perform certain types of testing or that a TCB must be accredited to perform reviews of FCC reports and issue FCC grants. The requirement that a professional engineer or a certified or FCC licensed engineer review and sign off will help ensure that the individual inspecting the system is qualified.

NARTE has discussed the value of certification as a benchmark of expertise with both the industry[7] and the Commission.[8] In fact, the Commission itself has sought the views of NARTE in several rulemakings involving discussions of Professional Installation. Requiring certification, licensing or other formal training helps ensure that the rules for operation in this band will be honored in the field. Numerous EMC labs and companies require some type of certification as proof of competency to fill certain technical positions.[9] In fact, as part of the EMC lab accreditation process, both NVLAP

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[5] Motorola Comments at 9.

[6] In reference to these systems, NARTE is talking about outdoor point to point or point to multi-point systems

[7] See Cisco, WFA and Information Technology Industry Council comments filed on 02-312, 03-201

[8] See NARTE comments and Ex Parte's filed on 02-312, 03-201

[9] A number of companies require people working on the IT installations to be certified by Cisco, Microsoft or hold equivalent certifications.

and A2LA use NARTE certification as an unofficial benchmark for proof of the labs' staff competency.

Therefore NARTE supports the Commissions view that professional installation should be at least one form of ensuring that unlicensed fixed/access devices are not unlawfully transmitting on television frequencies that are in use. We further agree with Motorola that either a NARTE certification, a SBE certification, a registered PE or someone holding a FCC General Class license, or the equivalents to them, be required to either install or inspect systems that require professional installations.

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